

Date: Thursday, 29/05/2008 11:05:04 AM  
User: Julie Lecocq

# Process Sheet

Customer	: CU-DAR001 Dart Helicopters Services	Drawing Name	: WEARPLATE
Job Number	: 39565		
Estimate Number	: 10606		
P.O. Number	:	Part Number	: D33193
This Issue	: 29/05/2008 S.O. No. :	Drawing Number	: D3319 REV. B
Prsht Rev.	: NC	Project Number	: N/A
First Issue	: / / Type : SMALL /MED FAB	Drawing Revision	: B
Previous Run	: 39313	Material	:
Written By	:	Due Date	: 15/06/2008 Qty: 12 Um: Each
Checked & Approved By	: <u>JUL 08.5.29</u>		
Comment	: Est: A 05.05.12 New issue KJ/JLM Est Rev:B Now on Waterjet 06-10-03 JLM		

## Additional Product

Job Number:



Seq. #:	Machine Or Operation:	Description :
---------	-----------------------	---------------

1.0	M1010S18GA	1010/1025/A21/6aA SHEET .048
-----	------------	------------------------------



Comment: Qty.: 3.4150 sf(s)/Unit Total: 40.9802 sf(s)  
1010/1025/A21/6aA SHEET .048" Thick  
Batch: 106603 B 8-8-26

2.0	WATER JET	FLOW WATER JET
-----	-----------	----------------



Comment: FLOW WATER JET  
1-Cut as per Dwg D3319  
Dwg Rev: B B 8-8-26  
Prog Rev: B  
2-Deburr if necessary B 8-8-26



3.0	QC2	INSPECT PARTS AS THEY COME OFF MACHINE
-----	-----	--



Comment: INSPECT PARTS AS THEY COME OFF MACHINE

4.0	QC8	SECOND CHECK
-----	-----	--------------



Comment: SECOND CHECK

S 28/06/27

5.0	SMALL FAB 1	SMALL & MEDIUM FAB RESOURCE 1
-----	-------------	-------------------------------



Comment: SMALL & MEDIUM FAB RESOURCE 1  
Deburr if necessary

u/a S 28/06/27  
Done at step 222

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

Date: Thursday, 29/05/2008 11:05:04 AM  
User: Julie Lecocq

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WEARPLATE

Job Number: 39565

Part Number: D33193

Job Number:



Seq. #:

Machine Or Operation:

Description :

6.0

BRAKE NC

NC BRAKE



Comment: NC BRAKE

Form using DT8326 & DT8261 as per Dwg D3319 Rev: B

SB 08/08/27 (S)

7.0

QC6

DIMENSIONAL CHECK



Comment: DIMENSIONAL CHECK

Soe/08/28 (S)

8.0

LARGE FAB 1

LARGE FABRICATION RESOURCE 1



Comment: LARGE FABRICATION RESOURCE 1

Weld hard surface using D3319-3T2 per QSI 004 and Dwg D3319 Rev: B

Qty Part Number Description Batch

A/R N/A

7560 Hardcoat Rod

M106762

(Cpl 08-08-29 GRIND)

(X5)

FL 8-8-29

9.0

QC10

VISUAL INSPECTION OF GROUND WELDS



Comment: VISUAL INSPECTION OF GROUND WELDS

Soe/08/29 (X)

10.0

QC5

INSPECT WORK TO CURRENT STEP



Comment: INSPECT WORK TO CURRENT STEP

Soe/08/29 (X)

11.0

POWDER COATING

POWDER COATING



M106442



(SX)

Comment: POWDER COATING

Powder Coat Grey Sandtex (Ref: 4.3.5.6) as per QSI 005 4.3

START TIME:

11:45

OVEN TEMPERATURE:

320 OF

FINISH TIME:

12:15

M-1

08/09/02

12.0

QC3

INSPECT POWDER COAT/CHEMICAL CONVERSION



Comment: INSPECT POWDER COAT

08-09-02 (SX)

13.0

PACKAGING 1

PACKAGING RESOURCE #1



Comment: PACKAGING RESOURCE #1

Identify on inside surface using a permanent fine point marker with the following:

TCCA-PDA, Dart Aerospace Ltd.

**Dart Aerospace Ltd**

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_  
 QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

**NOTE:** Date & initial all entries

Date: Thursday, 29/05/2008 11:05:04 AM  
User: Julie Lecocq

## Process Sheet

Customer: CU-DAR001 Dart Helicopters Services

Drawing Name: WEARPLATE

Job Number: 39565

Part Number: D33193

Job Number:



Seq. #:

Machine Or Operation:

Description :

P/N: D3319-3, B/N: BXXXXX  
For Product Eligibility see PDA05-18  
and Stock  
Location: 496

8/9/2

(5x) 50

14.0

QC21

FINAL INSPECTION/W/O RELEASE



08/09/02 *[Signature]*

Comment: FINAL INSPECTION/W/O RELEASE

Job Completion



12 08.09.02

W/O:		WORK ORDER CHANGES					
DATE	STEP	PROCEDURE CHANGE	By	Date	Qty	Approval Chief Eng / Prod Mgr	Approval QC Inspector

Part No: \_\_\_\_\_ PAR #: \_\_\_\_\_ Fault Category: \_\_\_\_\_ NCR: Yes No DQA: \_\_\_\_\_ Date: \_\_\_\_\_

QA: N/C Closed: \_\_\_\_\_ Date: \_\_\_\_\_

NCR:		WORK ORDER NON-CONFORMANCE (NCR)						
DATE	STEP	Description of NC Section A	Corrective Action Section B			Verification Section C	Approval Chief Eng	Approval QC Inspector
			Initial Chief Eng	Action Description Chief Eng	Sign & Date			

NOTE: Date & initial all entries

<b>DART AEROSPACE LTD</b>		<b>Work Order:</b> 39565
<b>Description:</b> Wearplate		<b>Part Number:</b> D3319-3
<b>Inspection Dwg:</b> D3319	<b>Rev:</b> B	<b>Page 1 of 1</b>

### FIRST ARTICLE INSPECTION CHECKLIST

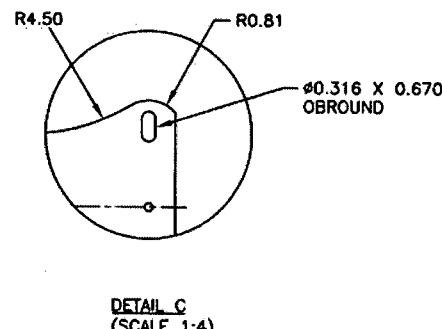
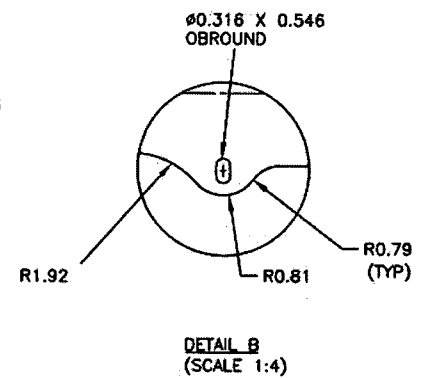
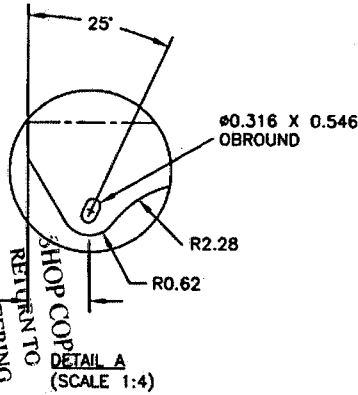
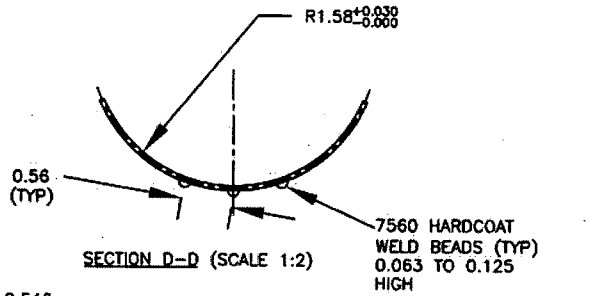
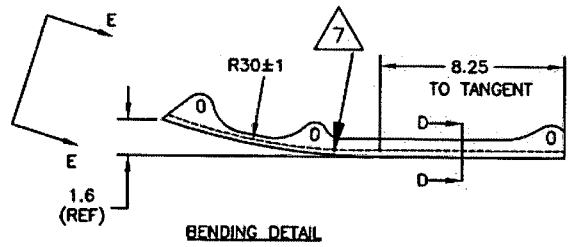
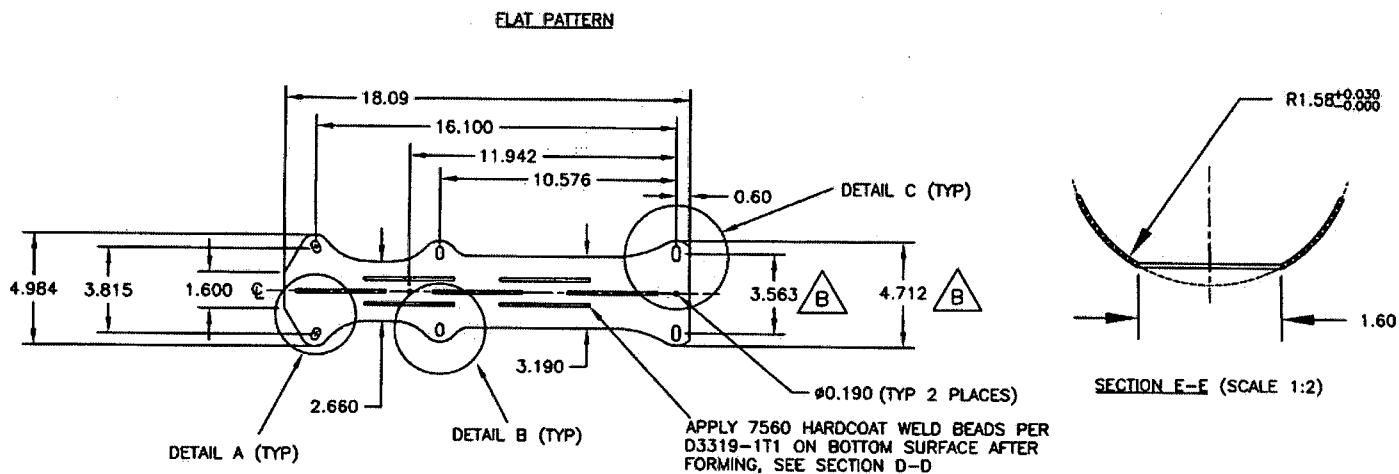
☒ First Article ☐ Prototype

Drawing Dimension	Tolerance	Actual Dimension	Accept	Reject	Method of Inspection	Comments
75.52	+/-0.030	75.52	X			
74.420	+/-0.010	74.420	X			
62.770	+/-0.010	62.770	X			
52.890	+/-0.010	52.890	X			
30.790	+/-0.010	30.790	X			
8.690	+/-0.010	8.690	X			
0.60	+/-0.030	.60	X			
2.690	+/-0.010	2.700	X			
2.940	+/-0.010	2.943	X			
3.527	+/-0.010	3.525	X			
4.518	+/-0.010	4.522	X			
Ø0.190	+0.005/-0.001	.192	X			
2.940	+/-0.010	2.948	X			
2.940	+/-0.010	2.948	X			
2.690	+/-0.010	2.693	X			
5.063	+/-0.010	5.063	X			
6.163	+/-0.010	6.159	X			
Ø0.316 x 0.607	+0.006/-0.001 x +/-0.010	318 x 609	X			
0.048	+/-0.010	.046	X			

<b>Measured by:</b> IB	<b>Audited by:</b> E	<b>Prototype Approval:</b>	N/A
<b>Date:</b> 8-8-26	<b>Date:</b> 8/8/07	<b>Date:</b>	N/A

Rev	Date	Change	Revised by	Approved
A	07.07.18	New Issue	KJ/JLM	E

**DART**



**D3319-1 WEARPLATE**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:  
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-1 B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-18"

DESIGN	DRAWN BY	DART AEROSPACE LTD
041	041	HAWKESBURY, ONTARIO, CANADA
CHECKED	APPROVED	DRAWING NO.
		D3319
DATE	TITLE	SHEET 1 OF 5
05.06.06	WEARPLATE	SCALE 1:8
A	04.09.24	NEW ISSUE
B	05.06.06	WIDEN HOLES, REDUCE WIDTH -3/-5/-7

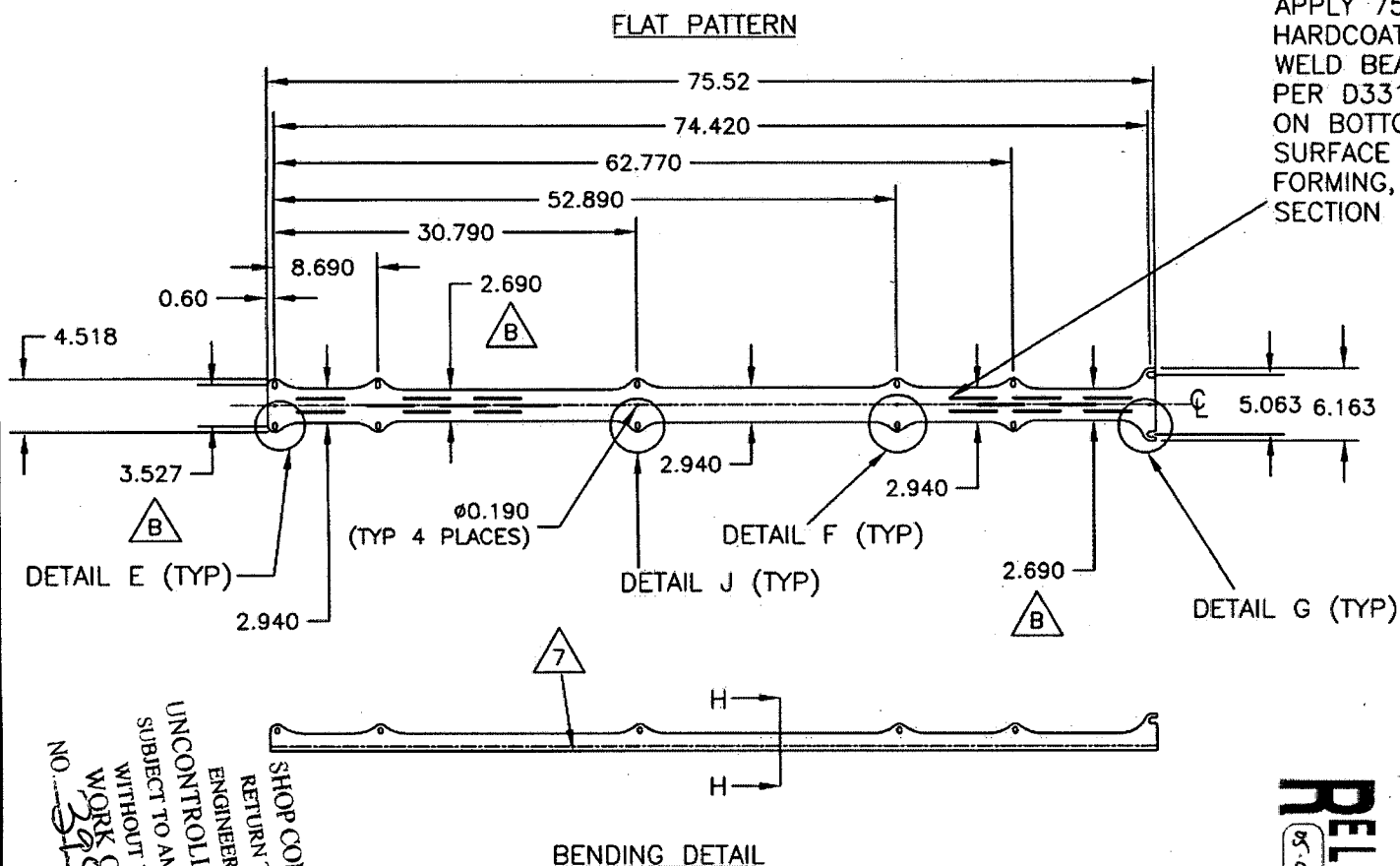
**RELEASED**  
05-09-30

UNCONTROLLED CO  
ENGINEERING  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 31565

**DART**

DESIGN	DRAWN BY	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED 04	APPROVED 04	DRAWING NO. D3319	REV. B
DATE 05.06.06		TITLE WEARPLATE	SHEET 2 OF 5
		SCALE 1:15	

APPLY 7560  
HARDCOAT  
WELD BEADS  
PER D3319-3T1  
ON BOTTOM  
SURFACE AFTER  
FORMING, SEE  
SECTION H-H



#### D3319-3 WEARPLATE

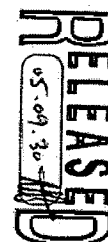
- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:  
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-3 B/N BXXXXX,  
FOR PRODUCT ELIGIBILITY SEE PDA05-18"

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 39505

RELEASED  
05-01-30

**DART AEROSPACE LTD**  
HAWKESBURY, ONTARIO, CANADA

12

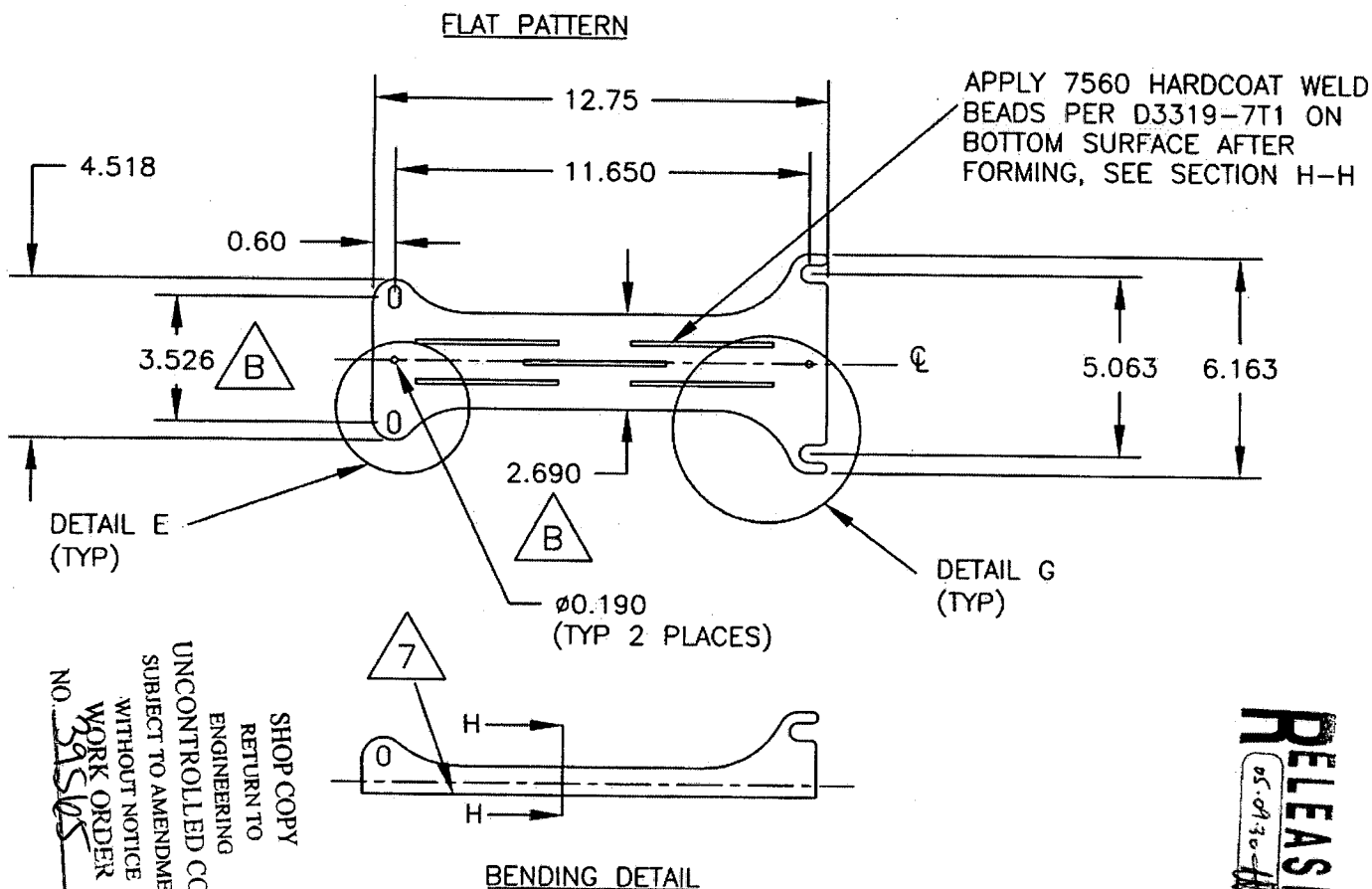


- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21,  
38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER:  
"TCCA-PDA, DART AEROSPACE LTD., P/N D3319-5 B/N BXXXXX,  
FOR PRODUCT ELIGIBILITY SEE PDA05-18"

**Copyright © 2004 by DART AEROSPACE LTD**

**DART**

DESIGN	DRAWN BY	DART AEROSPACE LTD HAMKESBURY, ONTARIO, CANADA		
PH	GH	DRAWING NO.	REV. B	
CHECKED PH	APPROVED GH	D3319	SHEET 4 OF 5	
DATE 05.06.06		TITLE WEARPLATE	SCALE 1:5	



**RELEASED**  
05.09.30-11

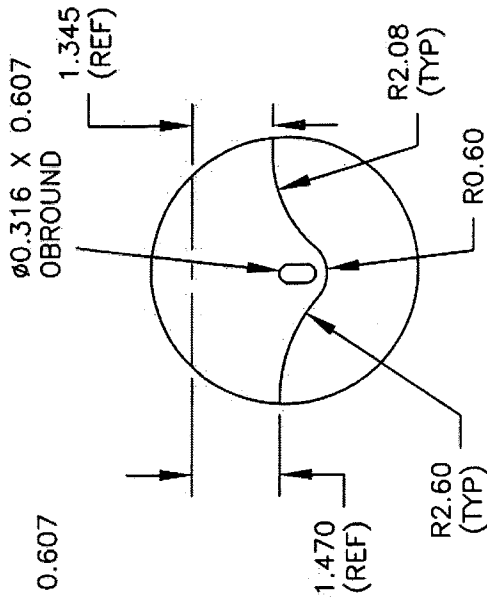
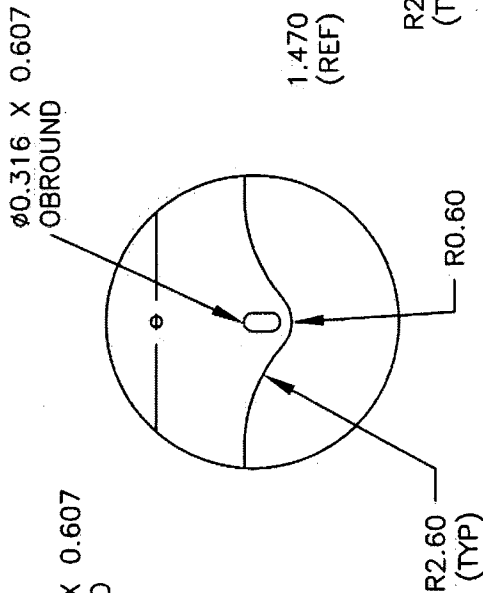
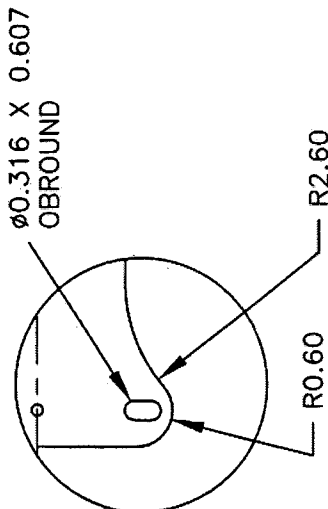
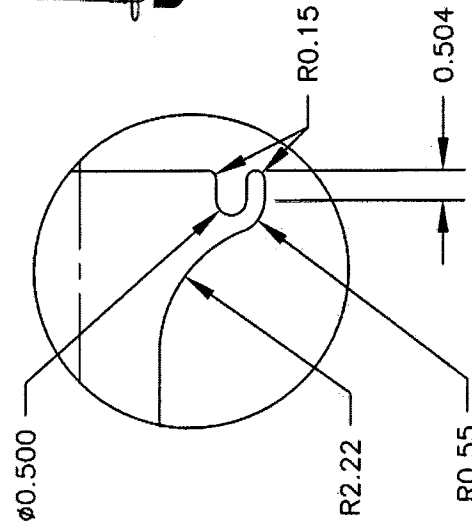
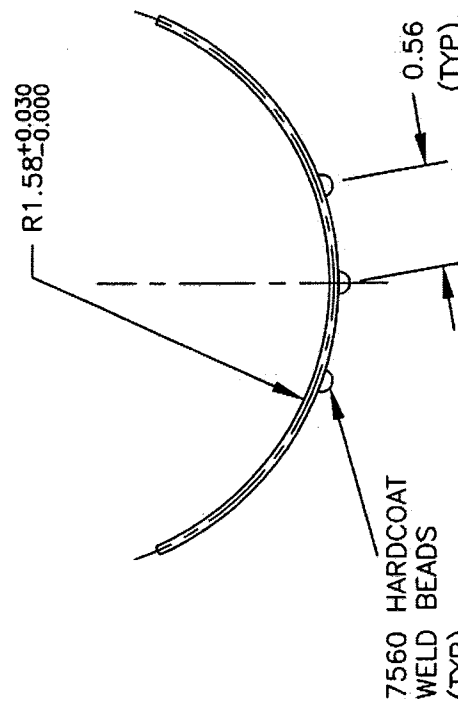
**D3319-7 WEARPLATE**

- 1) MATERIAL: AISI 1010-1025 OR ASTM A36/A366/A1008 OR CSA G40-21, 38W/44W/50W/60W/70W SERIES STEEL 18 GAUGE (0.048 THICK)
- 2) FINISH: POWDER COAT GREY SANDTEX (REF.4.3.5.6) PER DART QSI 005 4.3
- 3) TOLERANCES ARE PER DART QSI 018 UNLESS OTHERWISE NOTED
- 4) PART IS SYMMETRICAL ABOUT CENTERLINE
- 5) ALL DIMENSIONS IN INCHES
- 6) WELD PER DART QSI 004
- 7) IDENTIFY ON INSIDE SURFACE AS INDICATED USING FINE POINT PERMANENT INK MARKER: "TCCA-PDA, DART AEROSPACE LTD., P/N D3319-7 B/N BXXXXX, FOR PRODUCT ELIGIBILITY SEE PDA05-18"

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 39505

**DART**

DESIGN PH	DRAWN BY PH	DART AEROSPACE LTD HAWKESBURY, ONTARIO, CANADA	
CHECKED <i>[Signature]</i>	APPROVED <i>[Signature]</i>	DRAWING NO. D3319	REV. B SHEET 5 OF 5
DATE 05.06.06	TITLE WEARPLATE		SCALE 1:3

**RELEASED**  
05-09-30**DETAIL J****DETAIL F****DETAIL E****DETAIL G****SECTION H-H  
(SCALE 1:1)**

SHOP COPY  
RETURN TO  
ENGINEERING  
UNCONTROLLED COPY  
SUBJECT TO AMENDMENT  
WITHOUT NOTICE  
WORK ORDER  
NO. 39565

**Copyright © 2004 by DART AEROSPACE LTD**

THIS DOCUMENT IS PRIVATE AND CONFIDENTIAL AND IS SUPPLIED ON THE EXPRESS CONDITION THAT IT IS NOT TO BE USED FOR ANY PURPOSE OR COPIED OR COMMUNICATED TO ANY OTHER PERSON WITHOUT WRITTEN PERMISSION FROM DART AEROSPACE LTD.